

The Rufford Small Grants Foundation Final Report

Congratulations on the completion of your project that was supported by The Rufford Small Grants Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Ripu m Kunwar
Project title	Documentation and conservation of indigenous medicinal plants and traditional knowledge in Far western Nepal
RSG reference	18115-1
Reporting period	Sept 2016
Amount of grant	£4490
Your email address	ripukunwar@gmail.com, rkunwar@fau.edu
Date of this report	30/09/2016



1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Produce a comprehensive database of medicinal flora of far western Nepal including the subsets of indigenous, threatened and declined/declining species and newly introduced ones			Yes	More information of database is given below. A total of 39 declining species and 40 introduced species are enumerated.
Deposit the plant samples/specimens in KATH herbarium			Yes	A letter from KATH is attached.
Participatory mapping and inventory of IUCN threatened medicinal plant species		Yes		Report of distribution of these species is presented in fliers and distributed to local communities and organisations. Information from Darchula district was limited.
Develop and dispatch a booklet of each species consisting of precise and concise information about ecological functions, therapeutic roles, and conservation status.			Yes	Both booklets (fliers) are attached below.
Set local collaborations			Yes	District Forest Office, Baitadi and DFO Dadeldhura helped consented us to co-work in research and management of subject species. DFO Baitadi consented to co- work in the future (attached below).
Assess the role of secondary resources (non-indigenous plants and second-growth forests or			Yes	People are unwilling to go distant areas to collect the products in need. Thus,



habitats) in indigenous medicine systems amid the changes of climate, culture and communities of plants and people.			nearby and human derived landscapes are frequently foraged regardless of quality. Out of 41 non-indigenous species reported to the area, 26 were being used in indigenous medicines, resulting in indigenous system mosaic.
Develop two manuscripts from the research and publish in international journals in order to outreach audiences and liaise the international collaborations.		Yes	Two manuscripts were developed and submitted to PLOS One and GIS/RS journal. The article in PLOS One is in final stage of publishing while the same in GIS/RS is still under review.

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

Field visit was scheduled in December 2015 which was a bit problematic in making full day (7 am to 7 pm) field visits. Power outage and load shedding were prevalent in study area. The field visit time was onerous due to Indian blockade thus the vehicle ride and frequent access to fields were limited. In order to combat the situation, one professor (Prof Dr Keshab Shrestha, Tribhuvan University) and two assistants (Razan Mahat and Asmita Thapa) were included as associates in study team.

3. Briefly describe the three most important outcomes of your project.

* Plant database of study area was developed and diversity and distribution of two subject species were enumerated. A total of 692 plants species were compiled from our three study districts. Some of the specimens were deposited in KATH herbarium. Their voucher codes, origin, distribution, taxonomy, vernacular names, uses, etc. were documented in database. Of them, two species *Paris polyphylla* and *Oroxylum indicum* were studied in greater detail and their distribution inside Nepal and study districts was mapped and presented in GIS maps.



हरेणी - Oroxylum Indicum - हिंहीणही

रेपाको २०० प्रिंस १,४०० विहासी प्रचारित्रम पाढि हटेने लाख कुछाई सीमी स्थापा गृमेर म्हण्ड (Tonget Sowy), डेवेल के (Boakes Sowi), सीम्पार १९ (Moaget Nors) ? सार्गान्ड नाव सेम्हाप्ट प्रविद्य प्रकार (Doaylum Adow) से मेर्फिया अंग्रेड्स प्रवार्थ पर्वते, स्पेक्षार, ब्यूब्राग्रे, स्ट्र पूर्वतर्थ, ट्यूड, ब्यूबा संपद्य ।



pet flower, Tatelo) 9

1. A. A.

٨

Angiosperms > Dicots > Lan

सम्हल्सी एव ग्लीवचा यस सम्पनियों साल्प पत्रणे आव्याएसी छ । हिन्दुदूती पीलियुद्ध वट्याइत हिन तीलसः । सालपुरुषी विश्वित गरीजरात एव पाठल क करणते पुरुष्ठाई प्रान्तु कर्णावा (से.सि.) प्रार्थी विश्वती सालद पुर्वतिया सुराल्य क (से.सि.)

से विभावनों पार्टी होने हैं। मैं अध्येल कामने उन्हों और 10 जिटर और हो पलजर पुत्र के 1 कामने मेहना समेर की मार्जियर स्थान के प्रात्ति का में मैं है नहां राजी जातर कामी सामानों कीम फल के कैसे पीनी सीन 54 केंद्रियेहराजन काम की राजित राज्यों को स्थान हिया राजा मैं है जोड़ी राजी राजा राजा की स्थान के स्थान के प्रात्त के प्रात्त के स्थान के स्थान के स्थान के स्थान के स्था कैसे मार्जी राजी राजा क्या से काम का स्थानित पार्टी के प्रात्त का स्थान के स्थान का स्थान के स्थान के स्थान के से सामाने सामान राजा का स्थान के स्थान के स्थान के स्थान का सामाने राजे स्थान का स्थान के स्थान के स्थान के स्थान के सीने सामानों सामान राजा क्या के सामान का सामा कि स्थान के सामाने को सामाने को सामान के स्थान का सामान के सित्या सीने सामानों सामान राजा के सामान के सामान

eae > Orox

नेपालयो सुरू परिषय नेव कैसी न होन्दून दिल्लाया सवलाई दिएसेट, टिसैफ्सी न ठाउँ पॉन सॉन्फ्स । कार्लस साल, २३ वर्ग से पत्राने 'दिएस्ट' भरे न रही देखिलां मन्ते केसी जाएस दिस पिनेन प्रतिय दुनई कुमडने गोनी सत्राप्ता दिन् । यह बस्तूने पतन पॉन स्था व्यक्त जोन्द्रोजी नवार प्रत्या प्रेजन प्रांत्य :

			-	-	
थेवर्ष	मोनपान	-	****	(r-tr	abrent, and wrant, arise, lawryft
वनुवार, वेण्ड, बचर	रोतन, ततन	dilas.	ৰ্ণনচত	-	नानने, तारिन्ते, युवारवेनी, बोबो वेनी
वेषत्र	हुविन, कराजो, कराजो, टारनसी	See.	र र र	hee	बरस्वन्द्र, टोनी, सीचे टटान, टिटिसडी, तरबने किडी
नेवार	बनी, तरबर दिख, बानी	केर्स	हेन्द्रेपान	242	farverer
42.8	साइस, सोन्हाहा	जन्म	diezeu-d-dt		

वेदान, आरत, समेरिय, प्रोत्यस र द्यांग्य चीन, इन्द्रो-चीन

पेक्टबल कहा कहा पहुंच्छ : वेची दिस सरावाची, उच्च जनसामु देव भएका जिल्लाहर देवराज देवराजी।

युव युने र यज जाने स्वर : मेठ अवरण युन र अग्रे-वेषण यन जन्मत्र । प्रयोग हो भाषात : यस विस्तायों जस, प्राय, भाषा, विद्यु र वीमा :

रण्डेताः सन्दर्भे अनिन्दे तृताः या पत्रको तत्वली सन्दर्भ अनुमद्दाः ततः स्वतः भने तित्रे तृत्वः ।

And : It invest iden neve iden stars shee segui von ad



सतुवा - Paris polyphylla

नेपालको किसकी केसला 1,⊆00 सेंध 2,000 सीटरको उपार्थनाथमा पाने सर्वन १२ सेंथ 10 सिटर जास उपाई देने निरमावाई पियास किसाको समुख मार्ज सिर्फेस सने सामेंसे आपास प्रज प्र एकन (1.000 Anguht in Thie Richald Brain) अन्तिया न सुपास कीर जासाज जाने नेपांच पुरान केली, जिन्दाने सीकी, तासडास सम्प्राह, नदार र प्रार, जिलीया सुपा कीर-साकोली, लेकड़ास बाया सामित्र 1 किस्ता डेडेव्यून सम्प्रोटल प्रकाराहर साम्रोजे की निरम्लाके सांचा पर सन्तर्वाहर स्वान्तां हुने का

यो विक्वालाई कसरी चिन्ने ? यो आनेपास पार्टने जीपनगर

सम्प्राई भयरी भिर्मे । संचार संदेश, सील माई को देखे हो को से देखे हो के संकार की स्वार साथ है से । साधन के सुप्रमार देखि ९ मतो ने मुं की देखे हो को संकार में दूरवा प्रकारित साथ सील ने सारकी ने स्वार में ने साह सुप्रदा भाष्ट्री द्वारा सील मती स्वीनी साथ में आ सारक राजकी ने साह माई भारत में ने साह सुप्रदा । स्वारी भाष्य भारत में सिली साथ ने सा सारक राजकी स्वार माई ने साह सुप्रदा से मान में साथ में साथ में साल में साथ में साथ सा सा साम की स्वार मा

कुल ९ फल लाग्ये समय : फल चैत्र वैशास महिनामा फुल्दछ, फल असार आवण महिनामा लाग्दछ ।

sperms > Monocots > Liliales > Liliacea

ः । भुटानसम्मको हिमाली क्षेत्र, उत्तरी भारत, श्रिषपश्चिम चीन, म्यानमार, थाइल्याण्ड ।

वासरमानः ओरिसो र छायाँदार स्थान, १,=०० - ३,४०० मिटर उचाईको शितोष्ण देखि समशितोष्ण जलवायुमा बॉफ, सस्ला, कटुस र गुराँसको जगंल ।

. प्रयोजनमा शाउने भाग : जरा कन्द्र

बायुरीरेरु म्हूल्यः यो विरुपाको जरा चुर्थनासक, कफ नासक, मांसपेशी खुम्चिनेमा रोकथाम गर्ने, दथाउन समाउने, तागतवर र पेटको किरा मार्ने हुन्छ । वैत्रदी विपन्धाकटालना कडीवटी अन्तरन्त्रान वर्षे पाः चेत्रस सेफ

व उन्होंने पूर्व दिवसातः : । रसः घाउ पोटपटकमा टिन्बर डीनको रुपमा काम गर्दछ । वसले जूका भगाउँछ । तागत वडाउन तथा पेटका जनाल्म मदता गर्दछ । जस्ती सार्गन्छ । मैं उसमा पति उपयोगी मार्गिन्छ । सि अन्यसमा यसको रसबाट पेटको उक्त भार्ट गिरोग रहित्व ।

को दबाई हो होको छ । यसको जराको इ दुक्ते निको हुने, ज्वरो ई, तागतदार, शरीर ठंडा निन्द्रा बढाउने ७ ध्ररिको



٨

भाग नेपनाः असनों भाग : स्वसनों भाग ग्राइनियों पर्युत्त नगा वर्ष स्वाई पिए नियुत्त पार्वज्ञ नेप दुन्दा। चित्रवन जिन्तमा जनावे धुनी विट पूर्व, जस्ती र सोजन सिक्सनों अत्यस्था प्रति हुद्दा अस्वस्थानु देवसाला प्रता भाष्यप्रतने पेट लिंगकों र प्रोटीको माउनियों मार्ज मेले पिरस्य सर्पस्य साथै सह वैग विश्वार ने सेवन पार्वज पुले की सीलामा दुर र चाँद्र तापन निष्यु अने मान्यता छ।

भीपताली, मिलिंग स्वाप्त कार्य, सार्थन पूरवा स्वार्थम् । सार्थे, सार्थन् , सार्थित्वे सुर्वे अतं प्राप्ता का सात्र प्राप्त स्वीन प्राप्ता के सिंह प्राप्त संस्थान स्वार्थ्य स्वार्थ्य स्वार्थ्य स्वार्थ्य स्वार्थ्य स्वार्थ्य स्वार्थ्य स्वार्थ्य परिवर्ध, सिंहस्पता स्वार्थ्य स्वार्थित स्वार्थ्य स्वार्थ्य स्वार्थ्य स्वार्थ्य स्वार्थ्य सार्थ्य से सार्थन्त्र सिंह स्वार्थ स्वार्थन्त्र स्वार्थ्य स्वार्थ्य स्वार्थ्य स्वार्थ्य स्वार्थ्य सार्थन्त्र स्वार्थ्य स्वार्थन्त्र स्वार्थन्त्र स्वार्थ्य स्वार्थन्त्र स्वार्यन्त्र स्वार्यन्त्र स्वार्यन्त्र स्वार्थन्त्र स्वार्थन्त्र स्वार्यन्त्र स्वा



বিশ্বমাই হাঁৰ বাঁৰ দুৰা। বিয়কাৰ্থীয়ে নাইৰ জ উপৰু অৱস্থা যা। বাৰৰ কৰা আঁৱা নাইৰ ফাৰ আৰ কৰাইৰ। বা ৰাজ হৈছেৰ ৰ বাঁৰ জ্যাইৰ কৰা নামৰ চাইৰ হোঁৰ বাৰে বাঁৰ বাৰে কৰা মন্ত্ৰ কৰা নামৰ চাইৰ কৰা বাৰ বাৰে কৰা মন্ত্ৰ কৰা নামৰ কৰা কৰা কৰা কৰা কৰা কৰা কৰা হয় কৰা নামৰ কৰা কৰা কৰা কৰা কৰা কৰা কৰা কৰা বা ৰাজৰ জনাইৰ আঁৱা কৰা কৰা কৰা কৰা কৰা কৰা কৰা বা ৰাজৰ জনাইৰ আঁৱা কৰা কৰা কৰা কৰা কৰা কৰা কৰা

का ने पहुं। मुंदर मुं देवरेला के कहारे, समाज स्थार, निमार सीमामे साराव प्रदेश, साथ पुरित्य, प्रायुव्ध के प्राय जा न पुरुत में दुर्वरूप के कहारे, साथ मार्ट्स, मार्ट्स, साथ प्रायद, निमार प्रायु कि प्रायं, प्रायं का साथ के प्रायं कि प्रायं, निमार प्रायं, आपने, भार्ट्स, भार्ट्स, साथ प्रायं, में दिन्दा, सावीमां, प्रायंना मार्ट निमार प्रायं, मार्ट, मार्ट, मार्ट्स, भार्ट्स, भार्ट्स, भार्ट्स, मार्ट, मार्ट्स, साथ मार्ट्स, मार्ट्स, मार्ट कि को क्रांड के प्रायं के प्रायं के प्रायं के प्रायं के प्रायं, में दिन्द के को के प्रायं के कि प्रायं के क्रिय मा त

गोग	- 10	-	माने, प्रेम्बन करें	44.44	dere ef då closer	of Constant South States, NY, NY,
terre -					out facto, an after, distant a coping wall	and the second se
975 975	4				erfeit uferner muft fit genet mit g finter . frei mit ber	COMPANY WITH
1010	1				- fere eren web ween pere riett t	SCORE IN INVERSION
100					यो संदर्भ आई, जीवर द संकलमा केल माइन	
-		4			भागित्युकोचे सकन्ते केंद्राण भागमक छ.। ५ स्वेन कींग्रेजन अल्ग त्या प्रति कींग्राजन	
-		4			append of.	
मण समात स्वरण व्या स्वरिप्रा स्वरिप्रा	_	4			t. Of angents from persons with	And the state of t
1965	_	4			t fit an dere fen umpost and	THE ADD ADD
.	_	-	1		NUMBER OF A	HINN / YOU YOUN
पत्री बाल्युन	_		1		19404	
1011			1	1	Anne weeren erwe ab detter alle blieft - altenet merer viellen dettet alle	23
41				J.	ADDER COMPANY AND ADDER OF L	

देवेत र प्रेलगाः देवेगेसे वार्षे साणि मध्ये, विपाल र प्रवास पात्रे आपचल हुयाः स्वीतर्थन वीत्रियों मारा नहीं दायीय स्वति किंवा प् वेपाल व्यापाल के संबेधी विद् सेत्रियों साणी केल सविव्या की सावरण्या अविव्यावील केल सविव्या : स्वर्ण करणी

The endition the trade event and the set of the events in the link of version of the link of the event and the set of the event of the link of the event of the link of the event of the link of the event of the

Chief Chief Chief weiter in der Bertein Aller um weiter Beiter aus der eine Bertreich aus gestellt beiter auf der Bertreichen vorsig weiter Bertreichen Bert

বৰ উন্নয়ত কৰি বাবেছে। বৰ বিষয়েই আৰু দী ঘটনাৰ নামৰৰ মহুমেই মৃ, চি হুত্ এনাইগবায়েলেইৰ, চু-প্ৰেৰ্টায়ত, হাতনিৰ্দাল কৰিলপুটাবায়মু, নামৰিৰ, কামাউলিৰ, - উল্লেটখনাৰ মাজত, উন্নিৰমাজিৰ, প্ৰতিবিধ, উনিৰমানসমূহৰ, আঁলমাটোৰ দ্ব ৰ হি, মনাইগৈৰ, কাঁলমাটোৰ, বিচিন্ন আই ।

ৰ মাৰাৰ হাৰে বলৰাৰ পেনা দিবুলি ৫ বাবিকী উঠা আৰম বাবে প্ৰৱৰ্ত কৰা ৰাজত বিৰুদ্ধ উঠা পাৰ্বটোৰেৰ পৰিবৰ কৰা বজাৰী আৰম বুক বৰুৰ বিৰিদ্য কৰাৰ ব্যক্তিবাহৰ ৫-বাবিকেজিৰিক বছৰাইখন বনৰী কৰা ঘৰৰা বছৰ, বুকুৰী বছৰেৰ, বাব বা ব্যৱহাৰী মাজত ব বা বাৰী বুকিয়, বিৰু পি প্ৰাৰ্থনা আৰম্ভৰ মাহৰোঁ হয় :

ह । तः सारमधुर्वं केपले प्रदेशपूरी अपनीते नेपली प्राज्यमा प्राप्ती स्वाप्ताः यहूवे सः (६ किसी तो १९,००० स्टेंग्व सारम्यावीयी स्वाप्ताः प्रदेश । अत्रम, सारम्यारी, सुरीत र नेपल्यालय । अस्त्र स्वाप्त्री प्रसारम् स्व ।

स्वयत्त्व में Mit : ज्याची क्या की प्राप्त कुमई तथा को साथे केंद्रमा अवस्थ संस्था।



(b) र रोगावर : जा र गेगावर (के लिया प्रार्थ करियों का प्रतिक से किस्ता के प्रतिक से प्रतिक स्वति करिया । स्वते सिंग्से और प्रतिक प्रतिक सिंग्रा । स्वतुत के स्वता की सिंग्रा । सब्री स्वता करि स्वते किस्ता और प्रतिक प्रतिक स्वति । स्वता करिया । क्यां ने कि स्वता करिया ने स्वता करिया । स्वता कर्या ने स्वता करिया । स्वता करिया । क्यां ने कि स्वता करिया ने स्वता करिया । स्वता कर्या ना ना निर्वत करिया । स्वता करिया । क्यां ना कि स्वता करिया करिया स्वता करिया । स्वता कर्या ना ना निर्वत करिया । स्वता करिया । क्यां ना करिया ना करिया करिया स्वता करिया । स्वता कर्या ना ना निर्वत करिया । स्वता करिया । क्यां ना करिया ने स्वता के प्रतिक करिया स्वता करिया । स्वता कर्या ना ना निर्वत करिया । स्वता करिया ने स्वता करिया करिया ना करिया करिया ना स्वता करिया । स्वता करिया करिया करिया करिया करिया करिया करिया करिया । स्वता करिया करिया करिया करिया करिया करिया करिया करिया करिया ना करिया करिया । स्वता करिया ना करिया करिया । स्वता करिया करिय करिया करिय

-	-	-		44.44	शंखन को केंद्र गोलबर	A
pase.	1				is the stress are the orbital	and the second
44	1				Jupy an unsame ay	1 DA 10 _
-	1				रे कीकते पण जरावरी माठेरे	वर्तन्तुत निष्ठा पर्वतान्त्र मे
-	<u> </u>	4			abath a site state prevenue	
-		17			104 1023	10.000
-		-			के कर्मन गढरे स्थलकट सहस्तत करने 1 3 रहीको अन्द्रेता प्रमाहत	ALC: NO DESCRIPTION OF
-			1		um the feet present brand	Contract of the
-Ørt			4		ret effent :	-
भीता मैत्र			4			ALC: NOT THE OWNER.
-				4	THE	A STATE OF THE OWNER OF

Trans armania 2000 al aldare trans armania 2000 al aldare trans alores vita a र किर करते कड़करों पर कर रेणणा। के साले पर किसनी देशनी मोटूटी अपनी के साने संस्थान मंदी आज दिए पंडा । प्रमुंतक सरकारी प्रधान नैपाइन संस्थान भी पत गरेनवरी जहा माने संस्थान, अंग्रानों करीं होने, पंडी, मंदी किसने सॉर्डरा स्थापन की सार निसंक सी सामयक पाँडा, सम बनावेनी मेटी पत्र प्रधानि संस्थी की प्रथाने करते के प्रथा के प्रथान के सारक करने करते का सीवेज मुस्लिय पंडा के पितर करवानी के स्थापन के स्थापन अंग्री के प्रथान के प्रथान के प्रथान करने करने करते करते के सारक करते के सार पितर करवानी मेटी पत्र सार्वक सामयूरी के संपर्धन के सारक करते के सार्वक करते करते करते के सार्वक स्थापने करते क

- सम्पर्व सामझे : तित् कृते, न जनस मेन्द्र, न नरस्तीत कि

ৰ সময় । দু বুদা, ১৯০৫ সৈমৰা উদ্যায় ধৰ্পাৱলা, বা তিই সকলকা। বা বি বি বঁ, সময় ৰ নৈ বি বি কি কান। মূমৰ উদ্দে ১৯০৫ সৈমৰা উদ্যায় কৰিবলো, বুলি মূমৰ মানেটা। মূমৰ উদ্দে নাৰীৰ হাতিয়া, উন্দা, প্ৰতুল উদ্দি কাৰে, বিৰু সময় , কৰা কেনে, উন্দায় কৈ উদ্দেশ্যন নিয়া বুধবিদ পানাৰ, উদ্যান পাৰৰ তুইটো পানাৰ কৰা বিজয় আন মানিকা প্ৰতিদ বিজ্ঞান কৰে , কৰা কেনে, উন্দায় কৈ উদ্ধাননী বুধবিদ পানাৰৰ, উদ্যান পানা বুহুটো পানাৰ কৰা বিজয় আন মানিকা প্ৰতিদ বিজ্ঞান কৰা কৰা কৰা কৰা কৰা কৰা বুধবিদ প্ৰথম কৰা কৰা কৰা বুহুটো পানাৰ কৰা বিজয় সমা মানিকা প্ৰতিদ বিজ্ঞানৰ, মানৰ কোনে কৈ উদ্ধাননী মূল্য বা বুধবিদ পানাৰ, উদ্ধান পানা, মানাকা বিজ্ঞান কৰা বিজয় আন

XXX

week by the their states through this provide the state the second states and the second states the second states the second states and the second states the second state the second states the second states the second states the secon





* Local collaborators were excited to see the database and plant origin and their conservation status. They were capacitated and local collaboration was developed. DFO Baitadi is willing to continue the project and extend throughout the district with application of GIS and Remote Sensing and participatory approaches. Detail density, diversity, and distribution records of the threatened species is always helpful in setting local priorities for conservation.

Government of Najal Missory of Fords and Stall Conservation Department of Forest District Forest Office Julicol, Negal	
	3.5 Dear Min Bardan Ranwar
Rather tout frontities	Peeblo Alfaetic University,
Date: August 13, 2006	Revida, USA
In my physican to associate wHV W. Have Reserve a grantee of The Bard Secol Grant 2002 has invasively and association of Party adoptifier and Grantee colleges to tasked detract. Special Since to collegence Detract Theory Officer Office, Officer I is invested	Subject: Acknowledgement of Harborian Deposition.
2016, per bare here alter is to construct and period period period of the period of th	This is to inform that the 54 Horbarian opeciment exflocted from Far- West Region of Negal by you have been been accepted here at the National Horbarian - SATH. Details of the speciment set enclosed here with in a non-page attachment.
I which has all the best in the restletion and bodies between its language such " backward; constraining programs as her betweenest of language methods and when advocation function.	Thank you very mask for your skepesition and hast winters for your academic pursuit.
Notes Second Structure	Bainedt B. Harner Chief 181398
DOULEAND DOULEAND Construction Construction	
front dimetodal prog. Phone -077-85-520152	The second r. second r. read 11-1 accession, red Assoc 1750 Sec011



* A total of 208 plants are being used ethnobotanically, of them 26 are new to the indigenous system and increasingly introduced/used. Detail information of these species and their management prospects were discussed in manuscripts submitted for publishing. Two manuscripts developed from this study data including my previous data, are now in review and final stage of publishing. I acknowledged Rufford Foundation, RSGF for funding. Once the paper publishes in PLOS One (highly Impact factor journal), it will be highly cited and the RF is highly credited.

All History Science History Sciences Mark Sciences Sciences Provide Provide Sciences Sciences Provide Sciences	Contraction of the second seco	04	Q. (a) P. In Madeuri D. Indexa iii Project Protocolson iii Project Protocolson inter Inter P ⁽¹⁾ (2016)-0500000 A. (V053315611200.) P.
Land-use and so	PLOS ONE discontomic change, medicinal plant selection and biodiversity resilience in far western Nepal	Impact of land use	GIScience Remote Sensing change on indigenous medicinel plants and medicines in Farewater Magel —Mercent Data
Metalogi Natilei	PCAR D-16 200801	Pair Tale	Impact of last taxy strategy on suffigurant excitated plants and modificant in
Articio Tape:	Human's Article		Fanetian Note
F.4 TBe	Land use and automotive during, resistant just minimize and blackweight visitized in the women forced	Managerigi Hundrer Antole Tuck	TORGE STORE CO
About Tiles	Designment of the second secon	Second Type	services ended after an expetation inter, analy party land, integrate a second and
Convecting Autor	Hard Konser, MA Mile		and more vegetation transp. Fanalt Handare
	Provide dilactic University Name Finite, FUCHER (UNIVERS) (FVTER)	Managerigi Circolfordiane	Deale Deeps Despay's Network Information Lond Deep and Land Description (Landback Bodge
Kepenie Antoni	Indigence medicine (percent), second static image, second style (second static image), second style (second static image), second style (second style), second st	Alludare Ordent Vallers	The clusters of the table same to share the same the same the same site of
	Rati Artura Xian Tuuridaga		

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

A total of 112 individuals were personally met and discussed and shared the knowledge. The developed manuscripts describe their characteristics. In addition, fliers were distributed to local communities with the help of forest rangers of district forest offices. A complete list of plants of the districts (database) and distribution records of the subject species (*P. polyphylla*, *O. indicum*) were priorities of local communities and collaborators. One school (Siddeshwor LSS, Hukkedada, Baitadi) was equipped and teachers and students were motivated to conserve threatened species of the area. Teacher Mr. Narendra Bhatta and students Ms Laxmi Mahara and Mr Hikmat Mahara are involved in monitoring declining and non-indigenous species in their villages. Plants noticed by them as new to their area and or as endangered were shown to their teacher and sent to me for better identification.





Local people considered this plant (*Daphniphyllum himalense*, Lalchandan) as threatened (Upper left), Local people call this plant as Saupate, considered as threatened (Upper middle), Local people found this plant (locally called as Aterno) as a new to the village (Upper right), Siddeshwor LSS, Hukkedada, Baitadi (Bottom left), Non-indigenous (invasive) species: *Erigeron karvinskianus* (Bottom upper right), *Ageratina adenophora* (Bottom lower right).







School programme in Baitadi (upper), Dadeldhura (middle) and discussion in Darchula (bottom)

5. Are there any plans to continue this work?

Great knowledge of indigenous management of subject species was catalogued. However the knowledge holder's in particular elderly people and traditional healers are in jeopardy amid the changes of climate, land-use, socioculture and biomedicalization. This is further plagued due to elderly people's unwillingness to fully and completely share what they regard as secret information. Therefore more participatory researches convincing local communities about the importance of indigenous knowledge to the future generation, focussing on GIS mapping and documentation and conserving indigenous species like *Paris polyphylla* and *Oroxylum indicum* and their associated knowledge would greatly extend the conservation education among community members and their children and outreach the larger communities.



Since I am doing PhD on ecology, ethnobotany and ethnography of Darchula and Baitadi districts, a further support is always helpful. In the further support, I would be more capable to uncover the detail indigenous knowledge of collection, use and management of indigenous species, pursue ecological research on density, diversity and distribution of these plants and develop sustainable conservation guidelines for future implications. In the changing contexts, development of the most updated guidelines considering all biological, ecological, indigenous and GIS related information of the threatened and indigenous species is imperative.

6. How do you plan to share the results of your work with others?

The findings of this study particularly the indigenous knowledge of collection, use, marketing, and management of these two subject species were greatly discussed with my colleagues and two manuscripts were prepared and submitted to publish in international high impact factor peer reviewed journals for broad dissemination.

I also have one robust plan of sharing my findings through a book chapter. I am funded by ICIMOD to publish a book of Kailash sacred landscape (the landscape covers my study districts). I am going to write a book chapter about the Useful Plants of Darchula and Baitadi districts, and I may use some of the data of this project. I do acknowledge RSGF in that paper.

7. Timescale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project?

The anticipated schedule and the real time spent for the project were analogous. As planned, preparatory works were done in the first quarter, field visit in the second, data analysis in the third and publishing works were done in the last quarter.

8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

Item	Budgeted	Actual	Difference	Comments
	Amount	Amount		
Equipment	230	230	0	
Travel (US-KTM-US)	1000	1416	-416	
Local Travel field	500	219	+281	
Community programs, school	690	520	+170	
stationary, reference books and				
sport items				



Field accommodation	1300	1467.57	-167.57
Communication, stationary	250	240	+10
Herbarium management and	100	75	+25
identification, equipment			
Fliers production and dispatch	180	210	-30
Manuscript production and	80	105	-25
publishing			
Miscellaneous	160		
TOTAL	4490	4482.57	+7.43

NPR 1 = £ 0.007 (https://www.oanda.com/currency/converter/)

9. Looking ahead, what do you feel are the important next steps?

The most important thing is to run the project, achieve the expected outputs and outcomes and share the knowledge to larger audiences such as local communities, academicians, professionals and conservancies. Publishing results and finding and sharing knowledge to larger audiences yield bigger impact, create wider attention and generate larger stewardship for nature conservation. Regarding this project, communities are aware about the threatened plants and the factors of threatening. They are now aware about the importance of indigenous knowledge and its effacement. They are eager to identify and conserve the indigenous species and control the invasive species. Communities, school teachers and DFOs have asked to catalogue the indigenous knowledge before being lost. The knowledge from traditional healers and elderly groups is daily effacing due to sociocultural change, outmigration, and land-use change. Because of biomedicalization and acculturation, indigenous knowledge was belittled, and immediate, nearby, nonindigenous, secondary, human-derived landscapes, etc. are hastily utilised. In absence of indigenous knowledge, indigenous species and remote and rural areas were left unattended resulting in rampant spread of invasive species generating additional threats to the sustenance of indigenous species, and the list of threatened species is increased. Working with local communities and collaborators, developing participatory mapping (clusters of species), encouraging educating children, and acknowledging indigenous knowledge seem pertinent in the recent future to adapt the changes.

10. Did you use the RSGF logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

Yes. I used RSGF logo in the fliers we distributed to local communities and in the presentations I shared to the concerned individuals and institutions. Well, the RSGF



has been acknowledged everywhere including our forthcoming papers. I presented one paper Ethnobotany of Nepal in Missouri Botanical Garden, USA in June 17, 2016 and acknowledge the support of RSGF. We are also going to present one paper Dynamics of Indigenous Medicinal Plants and Medicines in Far Western Nepal in Braganca Conference, Portugal in October 6, 2016. We are also including RSGF in acknowledgement list.

11. Any other comments?

The RSGF was quite helpful to me in networking with local communities because I was originally interested to co-work with communities in order to catalogue the indigenous knowledge of collection, use and management of useful plants of Kailash Sacred Landscape used by elderly groups and traditional healers. With the due help of RSGF, we shared much more information and are agreed to co-work in conservation of indigenous medicinal plant species and management of indigenous knowledge. Both elderly groups and traditional healers are a repository of traditional knowledge and always unwilling to share their information, unless we do participant observations and participatory rural appraisal.